

What is claimed is:

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1. A mobile communications system, comprising:
a plurality of mobile communications devices;
a direct link, for communicating information between a communications
5 network and a selected one of the plurality of mobile communications devices;
and

a broadcast link, for simultaneously broadcasting information from the
communications network intended to be receivable by the plurality of mobile
communications devices.

10 2. The system of claim 1 wherein the direct link comprises a plurality
of transmitting and receiving antennas coupled to the communications network,
for transmitting information to, and receiving information from the selected
mobile communications device.

15 3. The system of claim 2 wherein the direct link comprises a telephone
network and the plurality of transmitting and receiving antennas are cellular
phone antennas.

4. The system of claim 1 wherein the broadcast link comprises a
broadcast transmitting antenna providing a signal over a relatively wide
geographical area, intended to be receivable by the plurality of mobile
20 communications devices.

5. The system of claim 4 wherein the broadcast link further comprises
a television broadcast system and the broadcast transmitting antenna is a
television broadcast antenna.

6. The system of claim 5 wherein the television broadcast antenna is a
25 terrestrial television broadcast antenna.

7. The system of claim 5 wherein the broadcast link further comprises:
a satellite ground station transmitting antenna, coupled to the
communications network, for transmitting information from the communications

network intended to be received by the plurality of mobile communications devices; and

5 a direct television satellite system satellite, comprising a receiving antenna for receiving the information transmitted by the satellite ground station, and the television broadcast transmitting antenna for broadcasting the received information over a relatively wide geographical area, intended to be receivable by the plurality of mobile communications devices.

8. The system of claim 1 wherein:

10 each of the plurality of mobile communications devices comprises a direct link antenna and a broadcast receiving antenna;

the direct link comprises a transmitting and receiving antenna, coupled to the communications network, for transmitting information to, and receiving information from, the direct link antenna of the selected mobile communications device; and

15 the broadcast link comprises a broadcast transmitting antenna, coupled to the communications network, for transmitting information to the broadcast receiving antenna of the mobile communications device.

9. The system of claim 1 wherein:

20 the communications network comprises the internet and includes a plurality of computer data servers for storing information;

the selected mobile communications device comprises circuitry to provide a request for information to the computer data servers via the direct link;

25 the computer data servers retrieve the requested information and supply the retrieved information to the communications network in response to the request from the selected mobile communications device;

if the retrieved information is expected to be requested simultaneously by the plurality of mobile communications devices, the communications network routes the information via the broadcast link to the plurality of mobile communications devices and routes data via the direct link to the selected 30 communications device specifying that the broadcast link contains the requested information, otherwise the communications network routes the requested

information via the direct link to the selected mobile communications device; and the selected mobile communications device further comprises circuitry to receive the requested information from the broadcast link in response to data received via the direct link that the broadcast link contains the requested 5 information, and to receive the information from the direct link otherwise.

10. The system of claim 9 wherein:

the broadcast link comprises a plurality of channels, the requested data is broadcast on a selected one of the plurality of channels, and the data routed to the selected mobile communications device specifying that the broadcast link

10 contains the requested information further contains data representing the channel carrying the requested information; and

the mobile communications device is responsive to the channel representative data to receive the requested information from the selected channel.

15 11. A method for communicating information between a communications network and a plurality of mobile communications devices, comprising the steps of:

supplying information intended for a selected one of the plurality of mobile communications device from the communications network to the selected mobile 20 communications device via a direct link to the selected mobile communications device;

supplying information intended for the plurality of mobile communications devices from the communications network to the plurality of devices via a broadcast link capable of being simultaneously received by the plurality of 25 devices.

12. The method of claim 11 wherein the step of supplying the information via the direct link comprises the step of supplying the information via a telephone network.

13. The method of claim 12 wherein the step of supplying the information via the telephone network comprises the step of supplying the information via a cellular telephone network.

14. The method of claim 11 wherein the step of supplying information via the broadcast link comprises the step of supplying the information via a television broadcast system.

15. The method of claim 14 wherein step of supplying the information via the television broadcast link comprises the step of supplying the information on a selected one of a plurality of channels in the television broadcast system.

10 16. The method of claim 15 further comprising the steps of:
the selected mobile communications device providing a request for
information to the communications network via the direct link;
the communications network retrieving the requested information in
response to the provided request;
15 if the information is expected to be simultaneously requested by the
plurality of mobile communications devices, supplying the requested information
to the broadcast link, otherwise providing the requested information to the
selected mobile communications device via the direct link;
if the information is supplied to the broadcast link, supplying data to the
20 selected mobile communications device via the direct link specifying that the
requested information is being supplied via the broadcast link, and specifying the
selected channel; and
the selected mobile communications device receiving the broadcast
requested information from the selected channel in the broadcast link in response
25 to the specifying data received via the direct link.

17. The method of claim 14 wherein the step of supplying the information via the television broadcast system comprises the step of supplying the information via a terrestrial television broadcast system.

18. The method of claim 14 wherein the step of supplying the information via the television broadcast system comprises the step of supplying the information via a direct television satellite system.

19. The method of claim 11 further comprising the steps of:
5 the selected mobile communications device providing a request for information to the communications network via the direct link;
the communications network retrieving the requested information in response to the provided request;
10 if the information is expected to be simultaneously requested by the plurality of mobile communications devices, supplying the requested information to the broadcast link, otherwise providing the requested information to the direct link.

20. The method of claim 19 further comprising the steps of:
if the information is supplied to the broadcast link, supplying data to the 15 selected mobile communications device via the direct link specifying that the requested information is being supplied via the broadcast link; and
the mobile communications device receiving the supplied information from the broadcast link in response to the specifying data.

21. A mobile communications device, comprising:
20 an interface for communicating information with a communications network via a direct link; and
an interface for receiving information from the communications network via a broadcast link.

22. The device of claim 21 wherein the direct link interface comprises a 25 mobile telephone interface.

23. The device of claim 22 wherein the mobile telephone interface comprises a cellular telephone interface.

24. The device of claim 21 wherein the broadcast interface comprises a television broadcast receiver interface.

25. The device of claim 24 wherein the television broadcast receiver interface comprises a terrestrial television broadcast receiver interface.

26. The device of claim 24 wherein the television broadcast receiver interface comprises a direct television satellite system broadcast receiver interface.

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27. The device of claim 21 further comprising a controller, coupled to the direct link interface and the broadcast link interface, for conditioning the mobile communications device to receive information from one of the direct link or the broadcast link in response to previously received data.

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28. The device of claim 27 wherein the device further comprises: a device, coupled to the controller, for receiving user input; wherein the controller is responsive to user input specifying information to be requested from the communications network, and provides data representing the requested information to the communications network via the direct link.

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29. The device of claim 28 wherein the user input receiving device comprises a keypad.

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30. The device of claim 28 wherein the controller receives data via the direct link interface indicating that the requested information is being broadcast via the broadcast link and receives the requested information via the broadcast link.

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31. The device of claim 28 wherein if the controller receives data from the direct link interface indicating that the requested information is being broadcast via the broadcast link then the controller receives the requested information via the broadcast link, otherwise the controller receives the requested data via the direct link.

32. The device of claim 28 wherein the broadcast link comprises a plurality of channels; and:

if the controller receives data via the direct link interface indicating that

the requested information is being broadcast via a selected one of the plurality of channels on the broadcast link then the controller receives the requested information from the selected channel of the broadcast link, otherwise the controller receives the requested data via the direct link

5 33. The device of claim 21 further comprising a display device, for displaying an image represented by requested information received from the communications network.

10 34. In a system comprising a plurality of mobile communications devices and a communications network, a method of operating a selected one of the plurality of mobile communications devices, comprising the steps of:

receiving information from the communications network intended for the selected mobile communications device via a direct link to the selected mobile communications device; and

15 receiving information from the communications network intended for the plurality of mobile communications devices, including the selected mobile communications device, via a broadcast link.

20 35. The method of claim 34 wherein the step of receiving information via the direct link comprises the step of receiving information via a telephone network.

25 36. The method of claim 35 wherein the step of receiving information via the telephone network comprises the step of receiving information via a cellular telephone network.

37. The method of claim 34 wherein the step of receiving information via the broadcast link comprises the step of receiving information via a television broadcast network.

38. The method of claim 37 wherein the step of receiving information via the television broadcast network comprises the step of receiving information via a terrestrial television broadcast network.

39. The method of claim 34 wherein the step of receiving information via the television broadcast network comprises the step of receiving information via a direct satellite television broadcast network.

40. The method of claim 34 further comprising the steps of:
5 transmitting data representing requested information to the communications network from the selected mobile communications device; and receiving the requested information by the mobile communications device from the communications network via one of the direct link and the broadcast link.

10 41. The method of claim 40 wherein the step of receiving the requested information comprises the steps of:

if the requested information is being transmitted from the communications network via the broadcast link, receiving data from the communications network via the direct link specifying that the requested information is being transmitted from the communications network via the broadcast link and, in response to the received data, receiving the requested information from the communications network via the broadcast link;

15 otherwise receiving the requested information from the communications network via the direct link.

20 42. The method of claim 41 wherein the broadcast link comprises a plurality of channels, and the step of receiving the requested information further comprises the steps of:

25 receiving data from the communications network via the direct link specifying that the requested information is being transmitted on a selected one of the plurality of channels of the broadcast link; and

if the requested information is being transmitted from the communications network via the broadcast link, receiving the requested information from the communications network via the selected channel of the broadcast link.